

Remarks

Reconsideration and allowance of the subject application are respectfully solicited.

Claims 1, 2, 4-17, 19-27, 29-34, 36-49, 51-59 and 61-77 are now pending in the application, with Claims 1, 13, 24, 33, 45, 56, 65, 70 and 75 being independent.

Claims 3, 18, 28, 35, 50 and 60 have been cancelled without prejudice. Claims 1, 13, 24, 33, 45, 56, 65, 70, 71 and 75 have been amended herein.

Initially, Applicants' undersigned representative wishes to thank the Examiner and his supervisor for the courtesies extended during the personal interview of December 10, 2003. The substance of the interview will be summarized in the following remarks.

Claims 1-77 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly not complying with the written description requirement. In particular, the Examiner suggested that the feature of the sterilant being maintained in a completely vapor state is not supported in the specification. While the specification clearly describes maintaining the vapor state of the peroxide (e.g., paragraph [0029] on page 10), in order to expedite allowance and advance prosecution it was agreed during the interview to delete the term "completely" throughout the claims. These changes have been made herein. Accordingly, reconsideration and withdrawal of the § 112, first paragraph, rejection are requested.

Claims 1-77 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,209,591 (Taggart). This rejection is respectfully traversed.

During the interview, it was agreed that independent Claims 65, 70 and 75 recite allowable subject matter. These claims have been amended herein solely in response to the § 112 rejection. Favorable consideration and allowance of independent Claims 65, 70 and 75 are requested.

With regard to independent Claims 1, 13, 33 and 45, although the claims are believed to be allowable over Taggart prior to amendment, these claims have been amended to recite that the nozzle is positioned in a range from just below a shoulder of the container to no closer than 15 mm from any internal surface of the container, as well as to recite that the sterilant is purged with gas from the nozzle, to even further distinguish from Taggart and the other citations of record. It is respectfully submitted that these amendments do not raise new issues because they mainly incorporate features from dependent claims. For example, the feature of positioning the nozzle to a position just below a shoulder can be found in original dependent Claim 3 and the feature of using the sterilant discharging nozzle also for purging can be found in original Claim 8.

The range of insertion of the nozzle is an important feature of Applicants' invention. For example, it has been found that the absorption of peroxide varies at different locations throughout a container due to the crystalline structure. It has been found that the higher the crystallinity, the less peroxide absorption occurs at a particular area. In certain PET bottles, it has been found that due to stretching, the shoulder has a lesser degree of crystallinity, while the container walls are stretched the most and have the highest degree of crystallinity. Due to the higher crystallinity, sterilant, even if it condenses, will be less likely to be absorbed into the container walls. Therefore, the feature of a nozzle

position in a range of from just below the shoulder to 15 mm from any perpendicular surface is important.

In the apparatus and method of Taggart, the sterilant nozzle is not inserted below the shoulder. Although probe 123 descends into the interior toward the bottom of the bottles, there is no disclosure as to how far into the interior the probe descends. Moreover, none of the figures depict the probe extending below the shoulder (note Fig. 10, for example). Accordingly, Taggart cannot disclose or suggest positioning a nozzle through an opening in a container and to a position in a range from just below a shoulder of the container to no closer than 15 mm from any internal surface of the container, as is recited in independent Claims 1, 13, 33 and 45.

During the interview, the Examiner mentioned U.S. Patent Application Publication No. US 2002/0159915 (Zelina et al.) for potentially teaching this feature. (It is respectfully requested that this document be made of record by the Examiner.) However, Zelina et al. is not believed to disclose or suggest such. Zelina et al. depicts various containers 120 including bottles or cartons. In Fig. 8, the peroxide fill line 172 does not appear to be below the resulting “shoulder” of the carton (the completely formed version of which is depicted at the rightmost end of the apparatus). In Fig. 9 of Zelina et al., the fill line 172 appears to be below the shoulder of the container, but there is no disclosure as to how close the exit of the fill line comes to the bottom of the container. In Fig. 12, fill line 202 does not appear to be positioned below the shoulder.

It is also respectfully submitted that Taggart does not disclose or suggest discharging sterilant vapor through a nozzle and purging the container of the discharged

sterilant with gas from the nozzle, as is also recited in independent Claims 1, 13, 33 and 45. In Taggart the interior bottle sterilization apparatus 116 and activation and drying apparatus 152 are discrete and use separate nozzles. During the interview, Applicants' undersigned representative brought to the Examiner's attention two U.S. patents (U.S. Patent Nos. 4,595,560 and 5,183,644), already of record, which may teach using a common inlet for inputting separate fluid streams to a container. Nevertheless, one of ordinary skill in the art would not look to these citations to modify Taggart, which clearly uses two separate stations and separate nozzles to perform inputting of separate fluids. Such a modification would be beyond the skill of an ordinarily-skilled artisan.

Thus, Taggart fails to disclose or suggest important features of the present invention recited in independent Claims 1, 13, 33 and 45.

Independent Claims 24 and 56 have been amended to teach the use of a common nozzle for discharging sterilant vapor and purging the container with a heated gas. Therefore, these claims are believed to be patentable over Taggart and the other citations of record for that reason as discussed above. Moreover, Claims 24 and 56 recite that purging is completed no longer than 30 seconds from discharging of the sterilant. This feature is also important in preventing residual sterilant from being absorbed into the container. Neither Taggart nor any of the citations of record are believed to disclose or suggest this feature.

Accordingly, Taggart also fails to disclose or suggest important features of the present invention recited in independent Claims 24 and 56.

Thus, independent Claims 1, 13, 24, 33, 45, 56, 65, 70 and 75 are patentable over the citations of record. Reconsideration and withdrawal of the § 103 rejection are respectfully requested.

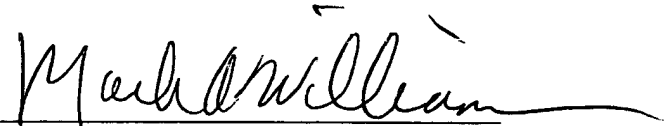
For the foregoing reasons, Applicants respectfully submit that the present invention is patentably defined by independent Claims 1, 13, 24, 33, 45, 56, 65, 70 and 75. Dependent Claims 2, 4-12, 14-17, 19-23, 25-27, 29-32, 34, 36-44, 46-49, 51-55, 57-59, 61-64, 66-69, 71-74, 76 and 77 are also allowable, in their own right, for defining features of the present invention in addition to those recited in their respective independent claims. Individual consideration of the dependent claims is requested.

This Amendment After Final Rejection is not believed to raise new issues, is an earnest attempt to advance prosecution and reduce the number of issues, and is believed to clearly place this application in condition for allowance. This Amendment was not earlier presented because Applicants earnestly believed that the prior Amendment placed the subject application in condition for allowance. Accordingly, entry of this Amendment under 37 CFR 1.116 is respectfully requested.

Applicants submit that the present application is in condition for allowance. Favorable reconsideration, withdrawal of the rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,


Attorney for Applicants

Registration No. 33,628

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

MAW\tnr

DC_MAIN 153830v1